

1. A method of providing performance information of a communication network, the method comprising:

receiving an instruction to request the performance information into a performance management system from a user system;

in the performance management system, processing the instruction to determine the performance information;

in the performance management system, generating a graphical format of the performance information; and

transmitting the graphical format of the performance information from the performance management system to the user system.

2. The method of claim 1 wherein the graphical format is a web page.

3. The method of claim 1 wherein the graphical format is a report.

4. The method of claim 1 wherein the graphical format is a screen.

5. The method of claim 1 wherein processing the instruction to determine the performance information comprises retrieving the performance information.

6. The method of claim 5 wherein retrieving the performance information is from a probe device.

7. The method of claim 6 wherein retrieving the performance information from the probe device comprises:

generating and transmitting a message to request performance information from the probe device; and

receiving the performance information from the probe device.

8. The method of claim 5 wherein retrieving the performance information is from a memory in the performance management system.

9. The method of claim 1 wherein processing the instruction to determine the performance information comprises calculating the performance information.

5 10. The method of claim 1 further comprising monitoring the performance information in the communication network.

11. The method of claim 1 further comprising storing the performance information in memory of the performance management system.

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12. The method of claim 1 further comprising in the performance management system, generating and transmitting a graphical overview of the communication network to the user system.

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13. The method of claim 1 wherein the communication network uses wireless signals.

14. The method of claim 1 wherein the communication network uses broadband wireless signals.

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15. The method of claim 1 wherein the performance information comprises a number of modems.

16. The method of claim 1 wherein the performance information comprises  
25 forward error correction information.

17. The method of claim 1 wherein the performance information comprises signal to noise ratio.

30 18. The method of claim 1 wherein the performance information comprises number of bytes.

19. The method of claim 1 wherein the performance information comprises speed of transmission.

5 20. The method of claim 1 wherein the performance information comprises channel information for a plurality of channels.

21. The method of claim 20 wherein the channels are upstream.

10 22. The method of claim 20 wherein the channels are downstream.

23. The method of claim 20 wherein the channel information comprises a state of one of the channels.

15 24. The method of claim 20 wherein the channel information comprises a change in a state of one of the channels.

25. The method of claim 20 wherein the channel information comprises a number of messages transmitted.

20 26. The method of claim 20 wherein the channel information comprises a time in a state of one of the channels.

25 27. The method of claim 1 wherein the instruction comprises a region of the communication network.

28. The method of claim 1 wherein the instruction comprises an Internet Protocol address.

30 29. The method of claim 1 wherein the instruction comprises a user identification.

30. The method of claim 1 wherein the instruction comprises a time or date.

31. A software product for providing performance information of a communication network, the software product comprising:

5 performance management system software operational when executed by a processor to direct the processor to receive an instruction to request the performance information from a user system, process the instruction to determine the performance information, generate a graphical format of the performance information, and transmit the graphical format of the performance  
10 information to the user system; and

a software storage medium operational to store the performance management system software.

32. The software product of claim 31 wherein the graphical format is a web page.

33. The software product of claim 31 wherein the graphical format is a report.

34. The software product of claim 31 wherein the graphical format is a screen.

20 35. The software product of claim 31 wherein the performance management system software is operational when executed by the processor to direct the processor to retrieve the performance information.

25 36. The software product of claim 35 wherein the performance management system software is operational when executed by the processor to direct the processor to retrieve the performance information from a probe device.

30 37. The software product of claim 36 wherein the performance management system software is operational when executed by the processor to direct the processor to generate and transmit a message to request performance

information from the probe device and receive the performance information from the probe device.

38. The software product of claim 35 wherein the performance management  
5 system software is operational when executed by the processor to direct the processor to retrieve the performance information from a memory in the performance management system.

39. The software product of claim 31 wherein the performance management  
10 system software is operational when executed by the processor to direct the processor to calculate the performance information.

40. The software product of claim 31 wherein the performance management  
15 system software is operational when executed by the processor to direct the processor to monitor the performance information in the communication network.

41. The software product of claim 31 wherein the performance management  
20 system software is operational when executed by the processor to direct the processor to store the performance information in memory of the performance management system.

42. The software product of claim 31 wherein the performance management  
25 system software is operational when executed by the processor to direct the processor to generate and transmit a graphical overview of the communication network to the user system.

43. The software product of claim 31 wherein the communication network uses wireless signals.

30 44. The software product of claim 31 wherein the communication network uses broadband wireless signals.

45. The software product of claim 31 wherein the performance information comprises a number of modems.

5 46. The software product of claim 31 wherein the performance information comprises forward error correction information.

47. The software product of claim 31 wherein the performance information comprises signal to noise ratio.

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48. The software product of claim 31 wherein the performance information comprises number of bytes.

49. The software product of claim 31 wherein the performance information  
15 comprises speed of transmission.

50. The software product of claim 31 wherein the performance information comprises channel information for a plurality of channels.

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51. The software product of claim 50 wherein the channels are upstream.

52. The software product of claim 50 wherein the channels are downstream.

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53. The software product of claim 50 wherein the channel information comprises a state of one of the channels.

54. The software product of claim 50 wherein the channel information comprises a change in a state of one of the channels.

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55. The software product of claim 50 wherein the channel information comprises a number of messages transmitted.

56. The software product of claim 50 wherein the channel information comprises a time in a state of one of the channels.

5 57. The software product of claim 31 wherein the instruction comprises a region of the communication network.

58. The software product of claim 31 wherein the instruction comprises an Internet Protocol address.

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59. The software product of claim 31 wherein the instruction comprises a user identification.

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60. The software product of claim 31 wherein the instruction comprises a time or date.

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61. A performance management system for providing performance information of a communication network, the performance management system comprising:

a reporting system configured to receive an instruction to request the performance information from a user system, process the instruction to determine the performance information, generate a graphical format of the performance information, and transmit the graphical format of the performance information from the performance management system to the user system; and a database system configured to store the performance information.

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62. The performance management system of claim 61 wherein the graphical format is a web page.

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63. The performance management system of claim 61 wherein the graphical format is a report.

64. The performance management system of claim 61 wherein the graphical format is a screen.

65. The performance management system of claim 61 wherein the reporting system is configured to retrieve the performance information.

66. The performance management system of claim 65 wherein the reporting system is configured to retrieve the performance information from a probe device.

67. The performance management system of claim 66 wherein the reporting system is configured to generate and transmit a message to request performance information from the probe device and receive the performance information from the probe device.

68. The performance management system of claim 65 wherein the reporting system is configured to retrieve the performance information from the database system.

69. The performance management system of claim 61 wherein the reporting system is configured to calculate the performance information.

70. The performance management system of claim 61 wherein the reporting system is configured to monitor the performance information in the communication network.

71. The performance management system of claim 61 wherein the reporting system is configured to generate and transmit a graphical overview of the communication network to the user system.



72. The performance management system of claim 61 wherein the communication network uses wireless signals.

73. The performance management system of claim 61 wherein the communication network uses broadband wireless signals.

74. The performance management system of claim 61 wherein the performance information comprises a number of modems.

75. The performance management system of claim 61 wherein the performance information comprises forward error correction information.

76. The performance management system of claim 61 wherein the performance information comprises signal to noise ratio.

77. The performance management system of claim 61 wherein the performance information comprises number of bytes.

78. The performance management system of claim 61 wherein the performance information comprises speed of transmission.

79. The performance management system of claim 61 wherein the performance information comprises channel information for a plurality of channels.

80. The performance management system of claim 79 wherein the channels are upstream.

81. The performance management system of claim 79 wherein the channels are downstream.

82. The performance management system of claim 79 wherein the channel information comprises a state of one of the channels.

83. The performance management system of claim 79 wherein the channel information comprises a change in a state of one of the channels.

84. The performance management system of claim 79 wherein the channel information comprises a number of messages transmitted.

85. The performance management system of claim 79 wherein the channel information comprises a time in a state of one of the channels.

86. The performance management system of claim 61 wherein the instruction comprises a region of the communication network.

87. The performance management system of claim 61 wherein the instruction comprises an Internet Protocol address.

88. The performance management system of claim 61 wherein the instruction comprises a user identification.

89. The performance management system of claim 61 wherein the instruction comprises a time or date.

90. A method of providing performance information of a communication network, the method comprising:

in a performance management system, generating and transmitting a graphical overview of the communication network to a user system;

receiving a first message for a region of the communication network from the user system into the performance management system;

in the performance management system, generating and transmitting a list of types of the performance information for the requested region of the communication network to the user system;

receiving an instruction to request the performance information from the user system into the performance management system;

in the performance management system, processing the instruction to determine the performance information; and

in the performance management system, generating a graphical format for the performance information.

91. The method of claim 90 wherein the graphical format is a web page.

92. The method of claim 90 wherein the graphical format is a report.

93. The method of claim 90 wherein the graphical format is a screen.

94. The method of claim 90 wherein processing the instruction to determine the performance information comprises retrieving the performance information.

95. The method of claim 94 wherein retrieving the performance information is from a probe device.

96. The method of claim 95 wherein retrieving the performance information from the probe device comprises:

generating and transmitting a second message to request performance information from the probe device; and

receiving the performance information from the probe device.

97. The method of claim 94 wherein retrieving the performance information is from a memory in the performance management system.

98. The method of claim 90 wherein processing the instruction to determine the performance information comprises calculating the performance information.

99. The method of claim 90 further comprising monitoring the performance  
5 information in the communication network.

100. The method of claim 90 further comprising storing the performance information in memory of the performance management system.

101. The method of claim 90 wherein the communication network uses wireless  
10 signals.

102. The method of claim 90 wherein the communication network uses  
broadband wireless signals.

103. The method of claim 90 wherein the performance information comprises a  
15 number of modems.

104. The method of claim 90 wherein the performance information comprises  
20 forward error correction information.

105. The method of claim 90 wherein the performance information comprises  
signal to noise ratio.

106. The method of claim 90 wherein the performance information comprises  
25 number of bytes.

107. The method of claim 90 wherein the performance information comprises  
30 speed of transmission.

108. The method of claim 90 wherein the performance information comprises channel information for a plurality of channels.

109. The method of claim 108 wherein the channels are upstream.

110. The method of claim 108 wherein the channels are downstream.

111. The method of claim 108 wherein the channel information comprises a state of one of the channels.

112. The method of claim 108 wherein the channel information comprises a change in a state of one of the channels.

113. The method of claim 108 wherein the channel information comprises a number of messages transmitted.

114. The method of claim 108 wherein the channel information comprises a time in a state of one of the channels.

115. The method of claim 90 wherein the instruction comprises a region of the communication network.

116. The method of claim 90 wherein the instruction comprises an Internet Protocol address.

117. The method of claim 90 wherein the instruction comprises a user identification.

118. The method of claim 90 wherein the instruction comprises a time or date.

119. A software product for providing performance information of a communication network, the software product comprising:

performance management system software operational when executed by a processor to direct the processor to generate and transmit a graphical overview  
5 of the communication network to a user system, receive a first message for a region of the communication network from the user system, generate and transmit a list of types of the performance information for the requested region of the communication network to the user system, receive an instruction to request the performance information from the user system into the performance  
10 management system, process the instruction to determine the performance information, and generate a graphical format for the performance information; and

a software storage medium operational to store the performance management system software.

120. The software product of claim 119 wherein the graphical format is a web page.

121. The software product of claim 119 wherein the graphical format is a report.

122. The software product of claim 119 wherein the graphical format is a screen.

123. The software product of claim 119 wherein the performance management system software operational when executed by the processor to direct the  
25 processor to retrieve the performance information.

124. The software product of claim 123 wherein the performance management system software operational when executed by the processor to direct the  
30 processor to retrieve the performance information from a probe device.

125. The software product of claim 124 wherein the performance management system software operational when executed by the processor to direct the processor to generate and transmit a second message to request performance information from the probe device and receive the performance information from the probe device.

126. The software product of claim 123 wherein the performance management system software operational when executed by the processor to direct the processor to retrieve the performance information from a memory in the performance management system.

127. The software product of claim 119 wherein the performance management system software operational when executed by the processor to direct the processor to calculate the performance information.

128. The software product of claim 119 wherein the performance management system software operational when executed by the processor to direct the processor to monitor the performance information in the communication network.

129. The software product of claim 119 wherein the performance management system software operational when executed by the processor to direct the processor to store the performance information in memory of the performance management system.

130. The software product of claim 119 wherein the communication network uses wireless signals.

131. The software product of claim 119 wherein the communication network uses broadband wireless signals.

132. The software product of claim 119 wherein the performance information comprises a number of modems.

133. The software product of claim 119 wherein the performance information  
5 comprises forward error correction information.

134. The software product of claim 119 wherein the performance information comprises signal to noise ratio.

10 135. The software product of claim 119 wherein the performance information comprises number of bytes.

136. The software product of claim 119 wherein the performance information comprises speed of transmission.

15 137. The software product of claim 119 wherein the performance information comprises channel information for a plurality of channels.

138. The software product of claim 137 wherein the channels are upstream.

20 138. The software product of claim 137 wherein the channels are downstream.

139. The software product of claim 137 wherein the channel information comprises a state of one of the channels.

25 140. The software product of claim 137 wherein the channel information comprises a change in a state of one of the channels.

30 141. The software product of claim 137 wherein the channel information comprises a number of messages transmitted.



142. The software product of claim 137 wherein the channel information comprises a time in a state of one of the channels.

143. The software product of claim 119 wherein the instruction comprises a  
5 region of the communication network.

144. The software product of claim 119 wherein the instruction comprises an Internet Protocol address.

10 145. The software product of claim 119 wherein the instruction comprises a user identification.

146. The software product of claim 119 wherein the instruction comprises a time  
15 or date.

147. A performance management system for providing performance information  
of a communication network, the performance management system comprising:  
a reporting system configured to generate and transmit a graphical  
overview of the communication network to a user system, receive a first message  
20 for a region of the communication network from the user system, generate and  
transmit a list of types of the performance information for the requested region of  
the communication network to the user system, receive an instruction to request  
the performance information from the user system, process the instruction to  
determine the performance information, and generate a graphical format for the  
25 performance information; and  
a database system configured to store the performance information.

148. The performance management system of claim 147 wherein the graphical  
format is a web page.

149. The performance management system of claim 147 wherein the graphical format is a report.

150. The performance management system of claim 147 wherein the graphical  
5 format is a screen.

151. The performance management system of claim 147 wherein the reporting system is configured to retrieve the performance information.

10 152. The performance management system of claim 151 wherein the reporting system is configured to retrieve the performance information from a probe device.

15 153. The performance management system of claim 152 wherein the reporting system is configured to generate and transmit a second message to request performance information from the probe device and receive the performance information from the probe device.

20 154. The performance management system of claim 151 wherein the reporting system is configured to retrieve the performance information from a memory in the performance management system.

25 155. The performance management system of claim 147 wherein the reporting system is configured to calculate the performance information.

156. The performance management system of claim 147 wherein the reporting system is configured to monitor the performance information in the communication network.

30 157. The performance management system of claim 147 wherein the communication network uses wireless signals.

158. The performance management system of claim 147 wherein the communication network uses broadband wireless signals.

5 159. The performance management system of claim 147 wherein the performance information comprises a number of modems.

160. The performance management system of claim 147 wherein the performance information comprises forward error correction information.

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161. The performance management system of claim 147 wherein the performance information comprises signal to noise ratio.

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162. The performance management system of claim 147 wherein the performance information comprises number of bytes.

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163. The performance management system of claim 147 wherein the performance information comprises speed of transmission.

164. The performance management system of claim 147 wherein the performance information comprises channel information for a plurality of channels.

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165. The performance management system of claim 164 wherein the channels are upstream.

166. The performance management system of claim 164 wherein the channels are downstream.

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167. The performance management system of claim 164 wherein the channel information comprises a state of one of the channels.

168. The performance management system of claim 164 wherein the channel information comprises a change in a state of one of the channels.

5 169. The performance management system of claim 164 wherein the channel information comprises a number of messages transmitted.

170. The performance management system of claim 164 wherein the channel information comprises a time in a state of one of the channels.

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171. The performance management system of claim 147 wherein the instruction comprises a region of the communication network.

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172. The performance management system of claim 147 wherein the instruction comprises an Internet Protocol address.

173. The performance management system of claim 147 wherein the instruction comprises a user identification.

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174. The performance management system of claim 147 wherein the instruction comprises a time or date.